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The results and conclusions in this report are based on a series of experiments conducted over a one-year period. The conditions under which the experiments were carried out and the results have been reported in detail and with accuracy. However, because of the biological nature of the work it must be borne in mind that different circumstances and conditions could produce different results. Therefore, care must be taken with interpretation of the results, especially if they are used as the basis for commercial product recommendations.

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## HDC HORTICULTURAL EMPLOYMENT SURVEY: HIGHLIGHTS

### 1. PURPOSE

Although for most growers, labour represents their highest input cost there is surprisingly little systematic information about just **how** important labour is. This prompted the HDC to commission an independent survey among its own members (registered and levy payers) to establish:

- **how many people** are employed by members and how they are distributed by size and type of grower.
- **how dependent growers are** upon the contribution of different kinds of workers, especially regular part-timers and casual workers.
- **how much time** is devoted to particular activities, such as management, maintenance, seasonal peak work, and marketing. This will help in identifying priorities for making more efficient use of the workforce.
- **labour costs** and how these are distributed by type of worker.
- **what problems** growers experience in recruiting people and **what qualities** they seek in the workforce.

Last autumn an independent specialist agricultural and horticultural consultancy, GBC Ltd, conducted a survey to which all 2,750 HDC members were invited to contribute. This is a brief summary of the main findings from the 600 (22%) replies that were received in time for analysis (in December 2005).

### 2. RELIABILITY OF THE SAMPLE

The number of replies represented a large sample and enabled detailed analysis to be undertaken. Also, comparison between all HDC members and those who took part in the survey on key characteristics such as the level of levy paid, the type of crops grown and region revealed a very close correlation between survey participants and all HDC members.

### 3. MAIN FINDINGS

The survey report contains a mass of detailed information about numbers employed, hours worked, use of time, wages paid, recruitment problems and other data: too much to summarise here. We therefore present only a brief review.

#### A. Size matters

This is obvious and well documented. If we examine HDC growers by levy band we find a fairly even distribution:

- 26% pay no levy at all (they are 'registered only')
- 26% are in the £50,000 < £100,000 band
- 27% are in the £100,000 < £300,000 band
- 21% are in bands above the £300,000 mark.

This has a great deal of bearing upon the numbers and types of worker employed.

### **i) Principals**

All businesses, whatever their size, have at least one principal and although the larger ones were more likely to have more than two, the distribution of principals did not vary greatly by levy band.

### **ii) Other workers**

Here differences were substantial. Businesses in the top (£300,000) bands (only 21% of HDC members) employed:

- 72% of the almost 4,000 supervisors employed
- 69% of the estimated 27,000 regular workers employed
- 76% of all casual worker 'days' (the survey found that HDC growers employ the equivalent of 20,000 full time workers on a casual basis).

### **B. Type of business**

Soft fruit and field vegetables growers have the greatest need for regular and casual workers:

<u>Crop category</u>	<u>Growers</u>	<u>Distribution of</u>	
		<u>Regular Workers</u>	<u>Casual Workers</u>
	%	%	%
Hardy nursery stock/bulbs & flowers	21	26	11
Ornamental protected crops	21	9	6
Edible protected crops	9	4	6
Field vegetables	17	33	<b>42</b>
Top fruit	14	7	12
Soft fruit	7	19	<b>31</b>
Others, no predominant crop	4	11	2
	<u>100</u>	<u>100</u>	<u>100</u>

### **C. Seasonality affects the use of labour**

#### **i) Peaks and troughs**

The survey identified peak, normal and slack months of the year. These varied by crop category, but among growers as a whole:

- the main 'peak' months were April to June
- the main 'normal' months were February, March and July to November, leaving only
- December and January as relatively slack months.

However, even in slack months many growers had some requirement for casual workers.

## ii) Hours worked

Principals of the businesses work the longest hours. For example the 'average' full time principal puts in a 63-hour week during peak months falling to 39 hours at slack periods. By comparison supervisors and regular workers' hours are more stable varying from around 50 at busy periods and close to 40 in slack months. The biggest demand for casual workers is for the five months from May to September.

## D. Use of time

- **For principals** the larger single call on time is looking after the business as a whole (40%). This varies by turnover band. For those in the 'below £100,000' category it takes up only 30% of their time; for those in the '£500,000 +' band it takes up, on average, 60% of time.
- **Marketing and selling** takes up, on average, only 12% of the average principle's time (the balance of time is taken up by **production-based** activities, such as maintenance and peak work).
- Only for larger (£500,000+) businesses do **supervisors** spend as much as half their time on overseeing the work of others. For most it appears to be more of a job title than a reflection of how they spend most of their time.
- Fulfilling **routine maintenance** duties takes up about 15% of the average supervisor's and regular worker's time. However, while supervisors often have other duties, most of the regular worker's day time is devoted to (peak) production work such as potting up, harvesting, pruning and other activities directly concerned with plant production.
- Predictably, almost all **casual workers'** time was spent on activities directly to do with production (preparatory work, harvesting, post harvest work).

## E. Wages

With these commonly accounting for around 40% of total operating costs (including an allowance for principals' drawings) the rates of pay clearly have a major bearing on profitability:

- **the average supervisor's** total hourly rate, after taking into account bonuses, overtime and other payments worked out at £8.80 an hour for a full-timer, £7.40 for a part-timer.
- **the average regular worker's** pay was £7.10 an hour for a full timer, dropping to £6.00 for a part worker.
- **casuals directly employed by the grower** were reported to earn an average of £5.90 an hour; if they were supplied by an agency, this rose to £6.40

Although there were differences in rates of pay by business size, type and region, they were not very marked.

Among those who provided estimates of **managerial salaries** the average was just over £23,000 a year.

## F. Employment Issues

In terms of a 'scale of difficulty' in recruiting staff (where 10 represented extremely difficult indeed), managers appear to be the most difficult to recruit:

<u>Type of personnel</u>	<u>Av Mark</u> <u>(Max 10)</u>
Managers: Full time	8.3
Part time	7.6
Supervisors: Full time	7.6
Part time	7.1
Workers: Full time	6.4
Part time	5.7

Six main problems of recruitment were identified:

- shortage of appropriate skills (particularly when trying to recruit managers).
- inability to compete on wages.
- lack of opportunities for promotion.
- poor working conditions, especially for workers.
- the nature of the work (seen as being too physically demanding for many workers).
- casual workers often fail to turn up.

Several other issues emerged from questions about employment. Among them:

- the importance of the SAWS scheme: it was the main source of recruitment for 27% of users of seasonal workers (among those using many seasonal workers some 46% identified it as the main source). Many growers also commented on the need to keep the scheme in place.
- despite the publicity about the importance of gangmasters as supplies of casual workers only 10% reported them as their 'main' source.
- growers want more skilled workers, particularly those with proficiency certificates.
- There is concern that the image of horticulture is a handicap to recruitment; being often seen as offering few opportunities for career development coupled with unattractive working conditions, wages and hours.

A copy of the full report is available from the HDC.

**HORTICULTURAL EMPLOYMENT  
IN GREAT BRITAIN**

**A SURVEY AMONG HDC GROWERS**

prepared  
for  
the

**HORTICULTURAL DEVELOPMENT COUNCIL**

by

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Economic Consultants to Agriculture

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## MANAGEMENT SUMMARY

### 3. Purpose

Although highly labour intensive there is surprisingly little systematic information about the size and structure of the British horticultural labour force or the use made of it. This study, the first of its kind, was commissioned by the Horticultural Development Council (HDC) to examine these, and other employment-related issues among its registered members, most of whom are levy payers.

Four main objectives were set:

- To examine the **size and composition** of the labour force.
- To establish **employment costs** measured in terms of hours worked, rates of pay and ancillary benefits.
- To identify the **problems growers have** in recruiting workers with the qualities they require.
- Specifically to examine the significance of the **casual labour force**, a resource so important to the operation of very many horticultural businesses.

### 4. Method

The HDC has about 2,750 registered growers on its books, over 2,000 of them (70%) are levy payers. All of them were invited to participate in this voluntary survey by completing a quite detailed questionnaire. This was sent by the HDC, towards the end of September, together with explanatory notes about completing it and a guarantee that any information provided would be treated in strict confidence and used only for statistical analysis. To ensure confidentiality the consultants were not provided with a list of addressees: the only information provided on the questionnaire were codes identifying the status of the addressee (as a registered or levy-paying grower) and, if a levy payer the 'turnover band' within which his levy contribution fell as well as a code identifying the county in which his business was based. Thus, unless the grower voluntarily added his name and address we had no means of identifying a particular grower's answers. (This concern for confidentiality had the downside that apparent anomalies or omissions could not be checked.)

There are, of course, many growers who are not HDC-registered. Although their numbers are believed to be relatively small there are some growers who should be registered but, through ignorance or intent, are not on the HDC database. There are many more who fall below the £25,000 threshold for registration. There is no definitive evidence about their numbers but work we have done in this sector and data available to the HDC suggests that about 6,000 (the vast majority very small businesses) fall into these categories. However, apart from contributing to the number of 'principals' (and then mainly part-time principals) their contribution to the total number of employees is, almost certainly, marginal. Our belief is that they contribute no more than 10-15% to total employment, including principals.

### 5. Response

By early December 2005 we had received exactly 600 completed questionnaires, which contained enough information to be analysed: a response rate of 22%. Although only just over a fifth of those eligible participated, checks undertaken on the sample suggest that, on key characteristics, it was representative of HDC growers as a whole. For example, analysis by turnover band showed that the largest discrepancy was only 3%:

(base)	<b>All HDC growers</b> (2,746)	<b>Sample</b> (600)
<b>Turnover band</b>	%	%
£25,000<£50,000 (registered)	26	24
£50,000<£100,000	26	25
£100,000<£200,000	19	19
£200,000<£500,000	15	15
£500,000	14	17

Similar minor differences emerged from regional and, as far as we can tell, crop sector analyses. In 'grossing up' from the sample, the minor imbalance by turnover band was corrected.

There is, however, one important matter to which attention must be drawn. The levy status of a grower is determined by the annual sales value of his own horticultural produce (after allowable deductions but including any processing that takes place). However, it does not include other growers' produce, which he may acquire for processing or (in the case of many retail nurseries) 'immediate' resale. In responding to the questionnaire it seems apparent that most, if not all, growers provided information about the **totality** of their horticultural businesses.

## 6. Main findings

### 6.1. Composition

The survey underlines the importance, to growers, of a large reservoir of part-time and casual, seasonal, labour. It estimates that about four in ten of the **regular** workforce are part-timers. However, much more important are (largely full-time) seasonal workers.

**Table S.1: Composition of employment**

		Businesses employing	Total numbers employed	
		%	No.	%
<b>1. REGULAR WORKERS</b>				
Principals	: full-time		5,250	9
	: part-time		1,250	2
	<b>Total</b>	<b>97</b>	<b>6,500</b>	<b>11</b>
Supervisors	: full-time		2,900	5
	: part-time		900	1
	<b>Total</b>	<b>43</b>	<b>3,800</b>	<b>7</b>
Regular workers	: full-time		14,700	25
	: part-time		12,300	21
	<b>Total</b>	<b>81</b>	<b>27,000</b>	<b>47</b>
<b>TOTAL REGULAR WORKFORCE</b>			<b>37,300</b>	<b>65</b>
<b>2. CASUALS: full-time equivalent*</b>		<b>66</b>	<b>20,000</b>	<b>35</b>
<b>GRAND TOTAL: ALL PERSONNEL</b>			<b>57,300</b>	<b>100</b>

\* We estimate that approximately 4.8 million 'casual worker days' were employed, equivalent to a full-time labour force of about 20,000 people. N.B. Due to rounding figures may not add exactly to totals.

## 6.2. Time input

Seasonality means that the demands on workers' time vary throughout the year. We sought to reflect this variability by asking growers to identify 'peak', 'normal' and 'slack' months of the year before then seeking estimates of the average number of hours put in, by different categories of personnel, during each period. While by no means wholly satisfactory this did permit very broad estimates of time input to be made. Table S.2 summarises the results.

**Table S.2: Estimated distribution of weekly hours**

Category	No. of people		Average hours per week	Total hours	
	No.	%	No.	No.	%
Principals : full-time : part-time Total	5,250	9	50	265,000	12
	1,250	2	22	25,000	1
	6,500	11	45	290,000	13
Supervisors : full-time : part-time Total	2,900	5	44	105,000	5
	900	1	33	45,000	2
	3,800	7		145,000	7
Regular workers : full-time : part-time Total	14,700	25	42	620,000	29
	12,300	21	24	300,000	14
	27,000	47	34	920,000	43
Casual: full-time equivalent	20,000	65	40	800,000	37
<b>GRAND TOTAL</b>	<b>57,300</b>	<b>100</b>	<b>38</b>	<b>2,150,000</b>	<b>100</b>

## 6.3. Profile of employment

We have referred to the fact that the amount of levy paid (if any) is not a precise guide to the size of a grower's business. However, it is a very good discriminator. For example, the distribution of workers is heavily skewed to larger levy payers.

**Table S.3: Distribution of employment by turnover band**

	All growers	Principals	Supervisors	Regular workers	Casual
(estimated No. in each group)	(2,750)	(6,500)	(3,800)	(27,000)	(20,000)*
<b>Turnover band</b>	%	%	%	%	%
Under £50,000	26	20	4	4	1
£50,000<£100,000	26	20	8	10	9
£100,000<£200,000	19	16	12	11	9
£200,000<£300,000	8	7	4	5	4
£300,000<£500,000	7	8	18	10	11
£500,000<£1 million	7	12	17	22	23
£1 million +	7	17	37	37	42
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

\*Full-time equivalent.

We also found that field vegetable growers (who tend to have larger-than-average businesses) made an above-average contribution to employment, as did the relatively small number of growers whose principal crop was soft fruit. Below-average contributions were made by growers of protected crops.

#### 6.4. Use made of time

Short of asking about every worker (a wildly-impractical device) we asked for approximate estimates, from each grower, of the amount of time spent by each category of worker on different tasks.

##### *i) Principals*

Although the number of principals increases with turnover band it does not do so in proportion to levy level: businesses over £500,000 only employ, on average, two or three times as many owners, directors or managers as those, on average, a fifth of their size. One possible consequence is that **general managerial duties** occupy a much higher proportion of their time, as does **supervising production**. By contrast 'hands on' activities such as undertaking routine maintenance and peak work such as planting, potting up, harvesting, grading, etc, absorb much more of the smaller growers' time than that of his larger counterparts. As does **marketing and selling** (more principals to share the task may explain why this accounts for only a small proportion of larger levy payers' time). Table S.4 compares the two extremes.

**Table S.4: Time spent on activities by principals**

	Average all growers	Turnover band	
		Under £100,000	£500,000 +
<b>Time spent on:</b>	%	%	%
General management	39	30	60
Production supervision	13	11	19
Routine maintenance	8	10	4
Peak work	17	22	4
Marketing and selling	12	14	8
Other activities, not answered	11	13	5
	100	100	100

##### *ii) Supervisors*

Not surprisingly, the main use of supervisory time was to undertake supervisory duties. However, except among the largest levy payers, most supervisory time was devoted to **other** duties, indistinguishable from those undertaken by regular workers.

**Table S.5: Time spent on activities by supervisors**

	Average all growers	Turnover band	
		Under £100,000	£500,000+
<b>Time spent on:</b>	%	%	%
General management	8	16	7
Production supervision	35	22	50
Routine maintenance	15	15	15
Peak work	25	24	20
Marketing and selling	8	16	2
Other activities, not answered	8	7	6
	100	100	100

##### *iii) Regular workers*

It is only when we get to this category of worker that we find the bulk of their time devoted to the day-to-day work of the business: plant production, either indirectly through keeping things well-maintained or directly, by weeding, planting, tending and harvesting the crops(s) grown. Only among growers below the £100,000 turnover band is a significant amount of

time (equivalent to about half a day a week) spent on another activity, marketing and selling (such as delivering produce, staffing the farm or nursery shop, etc).

**Table S.6: Time spent on activities by regular workers**

	Average all growers	Turnover band	
		Under £100,000	£500,000 +
<b>Time spent on:</b>	%	%	%
Management supervision	6	6	6
Routine maintenance	15	15	16
Peak work	61	55	64
Marketing and selling	7	12	2
Other activities, not answered	11	12	8
	100	100	100

**iv) Casual/seasonal workers**

Their time is largely production-orientated, with the bulk of time being devoted to work preparatory to, and undertaking, the harvesting operation itself. However, there were differences in emphasis by **crop sector**:

- Among **growers of nursery stock** (hardy and ornamental) about 80% of the work takes place on preparatory work up to, and including, the point of sale.
- For **edible crop producers** about half their casual workers' time is spent on harvesting itself, with most the remainder on preparatory work. This was also the case among **field vegetable** growers, though the remaining time was about equally distributed between pre- and post- harvest work.
- For **fruit growers**, especially top fruit producers, around 80% of the casual workers' time was spent on harvesting.

Because field vegetable and fruit growers are particularly heavy users of casual workers it seems probable that over half of all casual workers' time is spent on harvesting operations, with more emphasis on preparatory work accounting for the remaining time.

**6.5. Pay**

It was, of course, impracticable to ask about rates of pay for each employee; we had to be content with seeking 'average' rates for different categories. These varied from grower-to-grower both within and, to some extent between, different kinds of business. What follows, therefore, is a very 'broad brush' picture.

Distinguishing between the 'basic' rate of pay and the estimated overall hourly rate after taking account of overtime, piece rates and other incentives, the main findings are set out in Table S

**Table S.7: Estimated average rates of pay**

		Basic rate	Total rate
		£/hour	£/hour
<b>Supervisors</b>	: full-time	8.10	8.80
	: part-time	6.80	7.40
<b>Regular workers</b>	: full-time	6.20	7.10
	: part-time	5.70	6.00
<b>Casuals</b>	: employed by grower	5.30	5.90
	: agency supplied		51.40 (per day)



**Systematic variations** in pay rates were greatest among supervisors reflecting, we suspect, different levels of responsibility: the highest average ‘basic’ rate was £8.60 an hour, given by growers in the £500,000–£1 million band. Lowest paid were supervisors in the South West (average basic pay: £7.20). Variations in pay rates for regular and casual workers were quite small (on average only about 30p an hour).

**Managerial staff salaries**, when quoted, averaged £23,400 a year, with the top average being £30,000 among growers in the £1 million+ turnover band.

### 6.6. Recruitment problems

Apparently most difficult to recruit are full-time managerial staff. On a scale of 0-10 (0 being very easy, 10 extremely difficult) the average mark accorded was 8.2. Nearly as difficult to find were full-time supervisors (average mark 7.6). Five main reasons were given for encountering recruitment problems:

- **Shortage of appropriate skills** (especially for managers, supervisors).
- **Inability to compete on wages** (most important when recruiting regular workers).
- **Inability to offer promotion prospects** (an across-the-board problem).
- **Poorer working conditions**, especially for regular workers. This was coupled with the fact that the **work is hard, physically demanding**.

Other important problems nominated were a shortage of housing, the availability of other (less demanding) jobs. Apparently, growers who use casual workers often suffer from the fact that they can be unreliable.

### 6.7. Casual workers

While ‘word of mouth’ was the most frequently mentioned means of recruiting casual workers more formal sources, and particularly the SAWS scheme, are most important if large numbers of casuals are required. Table S.8 contrasts the responses from growers using relatively few casual workers (under 100 days a year) with larger customers (1,000+ days). There were, incidentally, twice the number of ‘large’ customers.

**Table S.8: Main source of recruitment of casual labour**

	Level of use (days per year)	
	Under 100	Over 1,000
(base: minimum number of growers using*)	(280)	(560)
<b>Main source</b>	%	%
Word of mouth	54	20
SAWS or similar agencies	8	46
Gangmasters	10	15
Employment agencies	7	12
Job centres	3	4
Advertising	2	2
Others, not stated	15	1
	100	100

\*Approximately 12% of users of casual workers did not provide estimates of their level of use.

While most growers recruit casual workers from domestic residents, an estimated 800 growers (also) rely on overseas-based personnel. Larger levy payers are particularly likely to

depend on overseas-based workers – roughly two-thirds of those using **any** casuals and whose businesses put them in the £300,000+ turnover bands source from abroad. As do field vegetable and fruit (especially soft fruit) growers.

Poland seems to be the largest single provider of overseas casual workers, most of whom come from Eastern Europe.

### 6.8. Contracting

The use, or provision, of **contract services** is limited to a small minority of growers, with more customers for these services than suppliers of them. We estimate that:

- Fewer than 400 growers (14%) buy in contract services, to the tune of about 60,000 days and at a cost of just over £5 million to them. Most 'buying in' is by growers in the larger (£500,000+) levy bands and by field vegetable growers.
- Fewer than 200 (6%) provide contract services. After discounting a couple of wildly improbable claims we estimate that the number of days sold (not necessarily to other growers) was approximately 12,000, generating an income of £1-2 million.

### 6.9. Qualifications possessed and sought

The most commonly possessed (and sought) qualification was the possession of proficiency certificates; followed by having a degree or diploma in agriculture and/or horticulture. Other non-industry-specific qualifications such as having a degree or diploma in business studies or a professional qualification (in for example, law or accountancy) were important largely to levy payers in the higher turnover bands. The absence of qualifications, apart from experience, was greatest among growers in the 'under £50,000' turnover band.

Table S9 carries a brief summary.

**Table S.9: Qualifications possessed/wanted**

		All growers	Turnover band		
			<£50,000	£50,000< £300,000	£300,000 +
			%	%	%
Proficiency certificates	: possessed	64	40	64	95
	: wanted	22	6	26	31
Degree/Diploma in agriculture/horticulture	: possessed	42	30	39	65
	: wanted	7	4	6	14
Degree/Diploma in business	: possessed	14	8	11	29
	: wanted	3	1	2	9
Professional qualifications	: possessed	8	6	5	18
	: wanted	2	1	2	6
None nominated	: possessed	27	47	26	13
	: wanted	72	90	69	62

When invited to identify any (other) skills from which they thought their businesses would benefit, those who answered put emphasis on **personal qualities**, such as an ability to tackle and resolve problems and to manage people. Also mentioned were quite specific skills such as a knowledge of languages, of regulatory requirements and an ability to sell.

### 6.10. Key issues

Invited to nominate any key issues that they thought most important in affecting employment in horticulture and the future of their businesses among the very wide range of answers five main issues came to the fore:

- Concerns about **pressures on margins**, for which supermarkets were usually held responsible, together with pressure on (wages) costs.
- Red tape: the imposition of **unnecessary bureaucratic procedures**, along with perceived inequities in the taxation system for casual workers. There were some who called for the abolition of the Agricultural Wages Board.
- The **nature of the industry itself** and its image: dependence on a large reservoir of casual and not-particularly-skilled labour, lack of opportunities for career development, perceptions of hard work for low wages. In short, a 'Cinderella' industry without a fairy godmother.
- **Purely practical problems of recruiting workers** resulting, in part, from the nature of the work and an unattractive pay and prospects image but suffering from a 'benefits culture' which is a disincentive to undertaking such work.
- **Concerns about the future supply of seasonal workers** from abroad (in which the SAWS scheme was seen as an essential component). For many growers their availability was seen as an integral part of their business.

### 6.11. Total sales

We have already explained that, while closely correlated, the level of levy paid (if any) is not a wholly accurate predictor of the total value of (horticultural) sales of a given grower. Many growers reported substantially higher sales than might have been expected from the amount of levy paid; some had **lower** sales. The average total value of sales reported for the past twelve months was just over £650,000. Grossed up this amounts to a total estimate, for all HDC-registered growers of about £1.8 billion. It is made up, by turnover band, as follows:

**Table S.10: Estimated total value of sales**

Turnover band	Approximate no. of growers		Average per grower	Total sales	
	No.	%	£'000	£m	%
£25,000<£50,000	714	26	100	70	4
£50,000<£100,000	715	26	140	100	6
£100,000<£200,000	529	19	270	145	8
£200,000<£300,000	208	8	430	90	5
£300,000<£500,000	204	7	1,000	204	12
£500,000<£1 million	187	7	1,100	205	12
£1 million+	189	7	4,900	925	52
Average, all growers	2,746	100	655	1,800	100

### 6.12. Employment costs

It is particularly difficult to put a precise figure to the cost, to HDC growers of their personnel. There were some internal inconsistencies in their responses to the relevant questions, a number of growers appeared to exclude themselves when asked to estimate what their annual employment costs were. Indeed, some did not even include themselves as being 'employed' by the business. This is not, of course, altogether surprising since many smaller growers' 'drawings' depend on what surplus is left over after all other costs have been met. In addition, some commented that they depended on 'voluntary' help from spouses and other family members. While, wherever possible, we made an admittedly

somewhat arbitrary adjustment to the figures quoted our suspicion is that, if anything, the ‘true’ labour costs of running many of the businesses in our sample are understated.

With these provisos in mind the survey evidence suggests that HDC growers’ employment costs in the twelve months preceding the survey amounted to around the £700 million mark, about 39% of total sales of about £1.8 billion.

The average masks a very considerable range. In some cases employment costs amounted to 70% of total sales value, in others it was nearer 20%.

Table S.11 summarises the relationship between employment costs and total sales.

**Table S.11: Employment costs as percentage total sales**

Average all growers	39
<b>Turnover band</b>	
<£100,000	40
£100,000<£300,000	38
£300,000<£500,000	33
£500,000<£1 million	43
£1 million +	28
<b>Main crop</b>	
Hardy nursery stock, bulbs and flowers	44
Ornamental protected crops	38
Edible protected crops	33
Field vegetables	27
Top fruit	36
Soft fruit	42
Others, unclassified	38

### 6.13. Other enterprises

Excluding any other farming enterprises (such as non-horticultural cropping or livestock farming) many growers had horticultural-related sources of income:

- Four in ten engaged in **wholesaling** and almost as many had a **retailing** operation.
- One in four engaged in **on-farm processing** (in the case of field vegetable growers, edible protected crop producers and soft fruit growers this ratio ranged from over 40% to almost 50%).
- 20% had a **nursery shop**. Among ornamental protected crop producers the ratio more than doubled, at 43% and among those in the under £50,000 turnover band it was 35%.
- 13% had a **farm shop**, 10% a **market stall**, and 7% each engaged in **processing** and operated **mail order sales**.

These ‘post-harvest’ activities appear to be an integral element in crop production.

## MAIN REPORT

### 1. Introduction

- 1.1.1. The Horticultural Development Council (HDC) has to accommodate, in its research programmes, the needs of growers of a whole range of crops, produced under different growing regimes. One important factor that unites almost all growers is that horticulture is highly labour intensive. Moreover, the need for labour is highly seasonal, giving rise to a requirement for a flexible labour force, one often met by utilising casual, seasonal, labour.
- 1.1.2. However, there is surprisingly little systematic information about labour utilisation in horticulture: the size and composition of the labour force, its variability throughout the year, the jobs done, the hours worked and the problems growers experience in recruiting and retaining suitable personnel. It is to provide reliable information on issues such as these that the survey, on whose findings this report is based, was commissioned.

### 2. Scope of Survey

- 2.1.1. The HDC's primary responsibility is, of course, to its own members. For this reason the survey was largely confined to two main categories:
- **Levy payers** (growers whose sales, after allowable expenses, exceed £50,000 a year, of which there are just over 2,000).
  - **Registered growers** (those whose sales require registration with the HDC – they are in the £25,000-£50,000 band – but who are non-levy payers. These number just over 700).

**All growers in these two categories were invited to take part in the survey.** All participants were guaranteed that their individual replies would be treated in strict confidence and only be used for statistical analyses.

### 3. Content

- 3.1.1. The growers who are registered with the HDC cover a very wide range of businesses. They vary in size from annual sales of £25,000 to over £20 million. They grow a very wide range of crops under different production systems. Their utilisation of labour ranges from having only one or two principals with, perhaps, part-time support staff to employing full-time managerial and supervisory staff as well as a number of regular workers and a substantial number of casual workers, whose utilisation varies – often quite significantly – from month-to-month. These, and other features of the labour force, such as whether they are full-time, part-time or seasonal employees, male or female had to be accommodated in a single questionnaire, sent to all registered growers.
- 3.1.2. The outcome was a nine-page questionnaire (supported by separate explanatory notes) which dealt with seven main topics:
1. **Numbers employed:** their composition (by the nature of their employment, sex and approximate age distribution and the kind of work they did).
  2. **Wages and benefits in kind:** basic rates and approximate total hourly earnings after taking overtime, bonuses and other payments into account; approximate annual earnings and other benefits enjoyed (housing, meals, etc).
  3. **Problems experienced** in recruiting workers.
  4. **Recruitment of casual/seasonal workers:** sources, country of origin.

5. **The provision, or use of, contracting services** (as a means of improving labour utilisation or avoiding the need to directly employ labour).
  6. **Qualifications and training:** skills possessed, skills required.
  7. **General issues** affecting employment in horticulture.
- 3.1.3. Additional questions about the size of the business, its main activities, etc, provided a means of identifying the extent to which such factors had a bearing on the answers.

#### 4. Response

- 4.1.1. Fuller details of the response (and particularly the non-response) to the survey will be found in the Technical Appendix. Here we present a brief summary.
- 4.1.2. Towards the end of September 2005, almost 2,750 registered growers (over 2,000 of them levy payers) were sent questionnaires by the HDC. By the end of November, when the books were closed, 600 analysable replies were received, a productive response rate of 22%. In addition a small proportion (about 10%) of 'active' growers on the HDC register comprising largely small (under £25,000 a year turnover) businesses were also mailed. However, only 19 (4%) returned analysable questionnaires, though many more wrote in, or telephoned, to say that they were no longer active. Since it was clear from the respondents that very many of those 'active' were, at best, marginal it was decided to exclude them altogether from the main survey report.
- 4.1.3. While, of course, the statistical validity of all sample surveys is enhanced by high participation levels there is good evidence to accept the reliability of this survey. To begin with, the 22% of productive responses reflects 22% of **all** HDC-registered growers and not just a small sample of them. More important, comparisons on two main criteria found a close correlation between the sample and **all** HDC growers.

#### a) Levy band

- 4.1.4. Before despatch each questionnaire was coded to enable us to identify its (HDC) turnover band into one of eight categories ranging from £25,000<£50,000 (registered growers) and £50,000<£100,000 to over £2 million (levy payers). In each of these categories there was a close match between the sample and the 'population' (of all growers).

**Table 1: Comparison of sample and population by levy band**

	All growers	Sample
(base: number of growers)	(2,746)	(600)
<b>Turnover band</b>	%	%
1. £25,000<£50,000	26	24
2. £50,000<£100,000	26	25
3. £100,000<200,000	19	19
4. £200,000<£300,000	8	7
5. £300,000<500,000	7	8
6. £500,000<£1 million	7	9
7. £1 million<£2 million	4	5
8. £2 million+	3	3
	100	100

N.B In this, and all other tables, percentages may not add exactly to 100 because of (a) rounding to the nearest 1% or (b) multiple answers. Numerical answers are also rounded, usually to the nearest 50 growers.

**b) Region**

4.1.5. The questionnaire also contained code numbers identifying the county in which the grower was based. (In a few cases where growers have holdings in more than one county the record was of the address from which the levy was paid). The resulting comparison between our sample and all registered growers, when grouped into seven regions, was quite close.

**Table 2: Composition of sample and population by region**

	All growers	Sample
(base: actual number of growers)	(2,746)	(600)
<b>Region</b>	%	%
1. South East	28	32
2. East Anglia	17	15
3. East Midlands	13	12
4. South West	11	12
5. West Midlands and Wales	11	11
6. North West	9	6
7. North and Scotland	10	12
	100	100

The allocation of counties to regions will be found in the Technical Appendix.

**c) Principal crops grown**

4.1.6. This is a much more 'fuzzy' criterion, principally because many growers produce more than one kind of crop: field vegetables **and** salad crops, for example, or top **and** soft fruit, protected **and** outdoor ornamentals, etc. To avoid double counting we classified each grower on the basis of whether at least 50% of his turnover was accounted for by a single crop category<sup>1</sup>. Where no single category predominated it was added (together with a small number of growers of specialist crops such as oriental vegetables or mushrooms) to an 'all others' category. In addition, some growers did not identify the crops they grew. Table 3 provides an estimate of the distribution of the principal crops grown based on the survey findings.

<sup>1</sup> With a few exceptions: we included bulbs/flowers (a small number of growers) in the 'hardy nursery stock' category and in a couple of cases where one crop accounted for the highest percentage of turnover (even if was below 50%) allocation was made to that crop sector.

**Table 3: Distribution of principal crops grown**

	All growers	Levy payers	Registered growers
(No. of questionnaires analysed)	(600)	(456)	(144)
(Total number of HDC growers: base for %)	(2,746)	(2,032)	(714)
<b>Principal crops</b>	%	%	%
Hardy nursery stock, including bulbs/flowers	28	26	32
Ornamental protected crops	21	16	35
Field vegetables	17	17	15
Top/stone fruit	14	19	2
Edible protected crops	8	8	7
Soft fruit	7	9	1
Other crops <sup>1</sup>	3	2	5
Unclassified <sup>2</sup> , not stated	3	3	3
	100	100	100

1. E.g. Mushrooms, oriental vegetables.

2. No predominant crop, question not answered.

4.1.7. Precise comparison with HDC data available to us is difficult. However, some 15% of the questionnaires sent out by the HDC were to growers registered as 'top fruit only' or 'top fruit and horticultural crops', 14% of our sample were mainly top fruit growers. A Reading University evaluation of the HDC, reported in 2004, but covering only a sample of levy payers and **excluding** top fruit growers produced a fairly close comparison in the responses obtained with our respondents. Excluding 'cross sector' responses from the Reading survey and top fruit growers, growers of other crops and 'unclassified' answers from **our** survey, the responses were very close indeed:

	Levy payers sample	
	Reading University	This survey
(base: no. of relevant responses)	(287)	(351)
<b>Sectors</b>	%	%
Hardy nursery stock/bulbs, flowers	33	34
Protected crops (ornamental and edible)	32	31
Field vegetables	24	23
Soft fruit	11	12
	100	100

4.1.8. There is, however, some evidence that both surveys may have, to a modest extent, under-represented the proportion of field vegetable growers among levy payers. On the Reading University study the response rate from this sector, at 37%, was below the average for all other sectors (at about 45%). However, the overall impact on both surveys is not, in our view, significant enough to be a cause for concern.

4.1.9. **An important caveat:** the reader will find that one of the basic analyses in the report is **turnover band**, which is based on the level of levy (if any) payable to the HDC. Indeed, as a broad index of business size it is usually the most important means of distinguishing between growers' responses. However, the turnover band within which a particular grower falls does not necessarily reflect the total size of his horticultural business. It excludes 'allowable expenses' such as the cost of compost, haulage, and produce bought for growing on. Also, excluded is the sales value of produce bought in for immediate resale as well, of course, as non-



horticultural goods, such as garden requisites. In the case of a grower-packer who packs for other (local or overseas) producers, the sales value of buying in this produce is an allowable expense. However, in reporting the use of labour it seems clear that these 'multi-enterprise' businesses, which are very common in horticulture, included the totality of their staff, irrespective of the duties they performed. This is perfectly understandable. These activities are an integral, indeed generally essential, part of their businesses. It would be unrealistic to expect them to distinguish on an already quite detailed voluntary questionnaire between the time spent by some of the staff on activities directly related to the propagation of their own crops and say, tending subjects bought in for immediate resale.

4.1.10. There is evidence to support this thesis. While not all growers revealed their total sales data, enough did so to enable a comparison to be made between the turnover band within which a particular grower fell and the value of sales reported.

- Nearly half of all 'registered-only' growers (in the <£50,000 band) reported 'last year' sales of over £50,000: 20% of them said their sales were over £100,000.
- Among levy payers in the £100,000<£200,000 band, almost half reported sales of over £200,000, 15% said they were over £350,000.
- In the £500,000-£1 million band (admittedly a small number of growers) about a third reported sales of over £1 million, a few above £1.5 million.

There were also some cases in which sales reported were **below** the growers' turnover band, but they were relatively few in number.

## 5. Analyses

5.1.1. In our report we have 'grossed up' the survey's findings to arrive at estimates of the total numbers of HDC registrants who fall into a given category. These figures are usually calculated to the nearest 50 growers. The base from which the calculations are made (the actual number of respondents) is shown at the head of most tables (this is the 'unweighted' figure). Also, shown (weighted base) is an estimate of the total number of growers responding to the particular question.

## 6. Scope of Report

This report is based on HDC registered growers. Of course, not all growers in Great Britain are registered with the HDC:

- Some, though probably only a small number, are large enough to be registered but, through ignorance or intent, do not do so. However, a consistent program of identifying levy avoiders has whittled away their numbers and will continue to do so. Our 'guesstimate' is that, if all growers large enough to be registered were covered by the survey the estimated size of the labour force would increase by between 5% and 10%.
- Many more, possibly around the 6,000 – 7,000 mark are too small (ie below the £25,000 threshold) even to be registered. Their contribution to the employed labour force is likely to be negligible. They will, however, make a significant addition to the number of 'principals', especially part-time principals, possibly doubling the number. For their businesses their labour input, if properly costed, would probably be significantly above that recorded, even by smaller HDC – registered growers.

## 7. Main findings

### 7.1. Introduction

7.1.1. We sought information about the number of people employed by each grower, asking for a distinction between:

- ... principals (the owners of the business, directors and managers);
- ... supervisors;
- ... regular workers; and
- ... casual workers.

For three of these categories (excluding casuals) we asked for a distinction between full- and part-time workers and between male and female workers. Casual workers are, of course, part-time by definition and presented a different requirement: their use varies, generally quite widely throughout the year rendering a 'snapshot' measurement of little value. Also their **composition** varies: the casuals employed one week may be different people from their predecessors, or successors. It is, therefore, more sensible to measure casual labour input in terms of 'man (or woman) days'.

### 7.2. Structure of employment

7.2.1. While practically all growers reported that they had at least **one** principal (3% didn't, perhaps an oversight, perhaps because they had no real role in the horticultural side of their business) not everybody employed other categories of worker:

- only 43% employed at least one (full or part-time) supervisor;
- however, 81% employed at least one regular worker, and
- 66% employed at least some casual workers, either directly or through agencies.

7.2.2. Table 4 examines the structure of employment in more detail, examining combinations of personnel employed. It shows that about a third of businesses involved the employment of **all four** categories (principals, supervisors, regular and casual workers). Next most common (about a quarter of growers) was the employment of principals and both regular and casual workers but not supervisors.

7.2.3. Size matters: once above the £200,000 turnover mark no growers rely solely on the input of principals. Above £300,000 between 64% and 88% (at the £300,000<£500,000 and £2 million+ levels respectively) depend on all four grades of staff. Since the £300,000+ turnover level appears to mark a watershed in the categories of personnel employed, Table 4 groups together turnover categories above this level.

**Table 4: Structure of employment**

	All growers	Turnover band			
		<£50,000	£50,000< £100,000	£100,000< £300,000	£300,000+
(base: no. of interviews)	(600)	(144)	(151)	(157)	(148)
(actual no. of growers)	(2,746)	(714)	(715)	(737)	(580)
<b>Structure</b>	%	%	%	%	%
Principals, supervisors, workers, casuals	32	6	23	33	74
Principals, workers, casuals	24	19	27	33	14
Principals and workers	16	31	17	13	2
Principals only	10	25	12	1	-
Principals, supervisors and workers	6	8	9	8	5
Principals and casuals	6	8	4	5	1
Other combinations	5	3	8	7	4
	100	100	100	100	100

### 7.3. Numbers employed

#### a) Principals

7.3.1. We estimate that the 'average' grower has between two and three (statistically-speaking 2.4) principals – that is, owners, directors or managers. This grosses to a total number of around 6,500 people. Not surprisingly the number of principals increases with business size, see Table 5.

**Table 5: Distribution of principals in HDC registered businesses**

Turnover band	Total no. of growers		Average no. of principals per grower	Total no. of principals (est.)	
	No.	%	No.	No.	%
Under £50,000	714	26	1.8	1,300	20
£50,000<£100,000	715	26	1.7	1,200	20
£100,000<£200,000	529	19	2.0	1,050	16
£200,000<£300,000	208	8	2.2	450	7
£300,000<£500,000	204	7	2.7	550	8
£500,000<£1 million	187	7	4.4	800	12
£1 million+	189	7	6.1	1,150	17
Total	2,746	100	2.4	6,500	100

7.3.2. However, not all principals are engaged full-time in the business: about one in five is, at least nominally, a part-timer. Nor are they all men: about three in ten are women. Women, however, are less likely to feature in the larger businesses.

**Table 6: Sex and status of principals**

		Total		Levy band					
				<£100,000		£100,000< £500,000		Over £500,000	
		No.	%	No.	%	No.	%	No.	%
MEN:	full-time	4,050	62	1,400	56	1,400	67	1,300	65
	part-time	600	9	350	14	100	6	100	5
TOTAL		4,650	71	1,750	70	1,500	73	1,400	70
WOMEN:	full-time	1,200	19	450	18	300	15	450	24
	part-time	650	10	300	12	250	12	100	6
TOTAL		1,850	29	750	30	550	17	550	30
ALL PRINCIPALS		6,500	100	2,500	100	2,050	100	2,000	100

Reminder: due to rounding, figures may not always add to totals.

7.3.3. In terms of age distribution while all but a small minority of principals are aged below 35, most are in the 35-54 age group. Part-time principals tend to be older, on average.

**Table 7: Age distribution of principals**

Age group	All principals		Full-time principals		Part-time principals	
	No.	%	No.	%	No.	%
Under 35	750	11	650	12	100	7
35-54	3,400	52	2,850	55	550	43
55 and over	2,400	37	1,800	34	650	51
	6,500	100	5,250	100	1,250	100
Average, approx	49 years		48 years		52 years	

N.B. This table is grossed up from about 90% of growers who answered the question.

7.3.4. We also asked about changes in the workforce over the past three years (since 2002). Of course, these only relate to those businesses which were also operative at that time, so any losses sustained by closures are excluded, but it does provide a broad guide to employment change among current HDC registrants.

7.3.5. Among principals we recorded a modest increase in numbers, from an estimated 6,000 in 2002 to approximately 6,500 in 2005. Much of this appears to derive from business start-ups since 2002 (or growth, resulting in registration since that year): 9% of growers reported that, in 2002, they had no principals.

**Table 8: Distribution of principals: 2002-2005**

Estimated number of principals	2002		2005	
	No.	%	No.	%
None reported	240*	9	70	3
One	680	25	780	28
Two	1,170	43	1,220	45
Three or four	510	19	520	19
Five or more	150	5	150	6
Total number of growers	2,750	100	2,750	100
Total number of principals	6,000		6,500	
Average per grower	2.2		2.4	

N.B. Because the changes were so small, we have broken our normal rule of expressing numbers to the nearest 50 and shown them to the nearest 10.

\*This may include growers not registered in 2002.

### b) Supervisors

7.3.6. Fewer than half HDC growers employ **any** supervisors, full- or part-time. We estimate that about 70% of the 3,800 or so who are employed work for larger (£300,000+ turnover) growers.

**Table 9: Distribution of supervisors in HDC-registered businesses**

Turnover band	No. of growers		Average no. of supervisors per grower	Total no. of supervisors (estimate)	
	No.	%	No.	No.	%
Under £50,000	714	26	0.2	150	4
£50,000<£100,000	715	26	0.4	300	8
£100,000<£200,000	529	19	0.8	450	12
£200,000<£300,000	208	8	0.8	150	4
£300,000<£500,000	204	7	3.3	700	18
£500,000<£1 million	187	7	3.5	650	17
£1 million+	189	7	7.4	1,400	37
	2,746	100	1.4	3,800	100

7.3.7. Men outnumber women supervisors by two-to-one. Three-quarters of all supervisors are in full-time employment.

**Table 10: Sex and status of supervisors**

		Total		Levy band					
				<£200,000		£200,000< £500,000		Over £500,000	
		No.	%	No.	%	No.	%	No.	%
MEN:	full-time	2,100	55	500	56	400	47	1,200	59
	part-time	300	8	100	11	50	6	150	7
	TOTAL	2,400	63	600	67	450	53	1,350	66
WOMEN:	full-time	800	21	150	17	150	18	500	24
	part-time	600	16	150	17	250	29	200	10
	TOTAL	1,400	37	300	34	400	47	700	34
ALL SUPERVISORS		3,800	100	900	100	850	100	2,050	100

7.3.8. While most are in the 35-54 age group, about a third of supervisors are under 35.

**Table 11: Age distribution of supervisors**

Age group	All supervisors		Full-time supervisors		Part-time supervisors	
	No.	%	No.	%	No.	%
Under 35	1,200	32	900	32	300	34
35-54	2,150	57	1,700	58	450	51
55+	400	11	300	10	150	15
	3,800	100	2,900	100	900	100

7.3.9. Our survey suggests that, among current HDC growers, there has been an increase by about 20% in the number of supervisors employed.

**Table 12: Distribution of supervisors: 2002-2005**

No. of supervisors employed	2002		2005	
	No.	%	No.	%
None reported	1,650	61	1,550	57
One	550	20	550	21
Two	200	8	250	9
Three or four	200	7	200	7
Five or more	150	5	200	7
	2,750	100	2,750	100
Total number of supervisors	3,050		3,800	
Average per grower	1.1		1.4	

### c) Regular workers

7.3.10. Grossed up from our sample we estimate that HDC growers employ, between them, about 27,000 regular workers. Six in ten are employed by businesses in the £500,000+ turnover bands, a mere one in twenty by those below the £50,000 threshold.

**Table 13: Distribution of regular workers in HDC registered businesses**

Turnover band	No. of growers		Average no. of workers per grower	Total no. of regular workers (estimate)	
	No.	%	No.	No.	%
Under £50,000	714	26	1.5	1,100	4
£50,000<£100,000	715	26	3.8	2,700	10
£100,000<£200,000	529	19	5.6	3,000	11
£200,000<£300,000	208	8	6.7	1,400	5
£300,000<£500,000	204	7	13.7	2,800	10
£500,000<£1 million	187	7	32.0	6,000	22
£1 million+	189	7	51.5	10,000	37
	2,746	100	9.8	27,000	100

7.3.11. Part-time employment is an important feature of the regular workforce, contributing 40% of the total, as do women.

**Table 14: Sex and status of regular workers**

		Total		Levy band					
				<£200,000		£200,000<£500,000		Over £500,000	
		No.	%	No.	%	No.	%	No.	%
MEN:	full-time	10,200	38	1,550	23	1,750	42	6,900	43
	part-time	5,750	21	1,900	28	800	19	3,050	19
	TOTAL	15,950	59	3,450	51	2,550	61	9,950	62
WOMEN:	full-time	4,550	17	900	13	450	11	3,150	19
	part-time	6,550	24	2,450	36	1,150	28	2,950	18
	TOTAL	11,000	41	3,350	49	1,600	39	6,100	38
ALL WORKERS		27,000	100	6,800	100	4,150	100	16,050	100

7.3.12. Although the sample size is small the survey suggests that full-time workers are an important component in the workforce of **very large** growers. Full-time workers contributed about 80% of the workers employed by businesses in the '£2 million plus' category. At the other end of the size scale women (mostly part-time) made up about half of the regular workers employed by businesses in the below £200,000 category.

Regular workers are younger, on average, than supervisors or principals. Indeed, about 4,000 are under 21. Part-time regular workers appear to be marginally younger than full timers.

**Table 15: Age distribution of regular workers**

Age group	All workers		Full-time workers		Part-time workers	
	No.	%	No.	%	No.	%
Under 21	4,150	15	1,700	12	2,450	20
21-34	12,400	46	6,600	45	5,800	47
35-54	7,250	27	5,000	34	2,250	18
55+	3,200	12	1,450	10	1,750	14
	27,000	100	14,700	100	12,300	100

7.3.13. Alongside the increases in the numbers of principals and supervisors between 2002 and 2005, we also record an increase in the number of regular workers, by about 18%.

**Table 16: Distribution of regular workers: 2002-2005**

No. of workers employed	2002		2005	
	No.	%	No.	%
None reported	600	22	550	19
One or two	700	26	800	30
Three or four	450	17	450	17
Five to nine	450	17	450	17
Ten or more	500	19	500	19
	2,750	100	2,750	100
Total number of workers	22,300		2,700	
Average per grower	8.1		9.8	

7.3.14. Overall, therefore, those businesses currently operating appear to have increased, if only modestly, the number employed.

#### d) The importance of crop category

7.3.15. Before leaving the subject of regular employment it is worth looking at the importance of the types of crop grown. As we have already noted, this is a somewhat arbitrary classification because many growers produce more than one type of crop: overlaps between protected crops and those grown in the open, or between top fruit and other horticultural crops are a couple of examples. With this proviso in mind Table 17 below carries the details.

**Table 17: Employment by crop category**

Crop category	All growers	Distribution by employment of		
		Principals	Supervisors	Regular workers
	%	%	%	%
Hardy nursery stock/bulbs flowers	28	28	31	26
Ornamental protected crops	21	18	15	9
Edible protected crops	8	7	4	4
Field vegetables	17	25	24	33
Top fruit	14	10	13	7
Soft fruit	7	6	10	19
Others, no predominant crop	6	3	2	11
	100	100	100	100



- 7.3.16. While the distribution of principals is fairly close to that of all businesses (it would be expected, since almost all businesses reported having at least **one** principal, while relatively few had more than two) there is greater variation among supervisors and workers.
- **Field vegetable growers** (17% of the total sample) contributed about a quarter of all supervisors and a third of all workers. Numerically this means that the 4,650 field vegetable growers employed almost 10,000 of the combined supervisor/regular worker workforce of just over 30,000.
  - **Soft fruit growers**, although only a couple of hundred strong, are, apparently, disproportionately important employers of supervisors or regular workers, employing over 5,000 people, almost a fifth of the total workforce.
  - On the other hand, growing **ornamental and edible protected crops** appears less labour-intensive, at least in terms of regular workers. While accounting for 29% of all growers, they employed only 14% of supervisors and regular workers.
  - **Top fruit production** also seems to need fewer than average supervisors and regular workers (they may, of course, make above average use of casuals - this we shall examine next).

#### e) Casual workers

- 7.3.17. It is widely acknowledged that horticulture depends heavily on seasonal, casual, labour – often from abroad. However, the extent of this dependence has been largely a matter for speculation, as the use of ‘casuals’ varies throughout the year. There is also another feature of this category: the composition of the workforce varies, often from day-to-day, making it less relevant to establish the **number of people** employed than to identify the **number of days worked**. (While it would be interesting to establish how many different casual workers were employed such a task would have overburdened this survey.)
- 7.3.18. We set about the issue by asking growers to estimate, month-by-month over the previous year, the number of ‘casual worker days’ worked on their holding. Not all growers reported **using** casual workers and, among those who did, not all attempted the, quite onerous, task. However, most growers did make estimates for us to make an approximation to the total level of use of these workers.
- 7.3.19. We estimate that about 1,800 growers (two-thirds of the total) made at least **some** use of casual workers in the past year (from September 2004 to August 2005). Those who gave estimates of the number of days ‘bought’ over this period, suggests a grossed up level of around the 4.5 million days mark. Assuming those who did not provide an estimate (about 12% of the total) conformed, on average, closely to those who did, this figure increases to approximately 50 million days. Naturally, both the estimates are very approximate. However, they do suggest a total casual labour usage equivalent (assuming a ‘working year’ of approximately 240 days) to approximately 19,000-21,000 full-time workers.
- 7.3.20. A characteristic of the use of casual workers is the heavy dependence on them by **very large** growers. Growers in the £2 million+ turnover band only account for 3% of HDC members (3% of our sample which in numerical terms, is only 17 growers) but, when grossed up, account for over a quarter of all casual days. At the other extreme, those who are only registered (i.e. below £50,000) comprise over a quarter of all HDC growers but only account for just over 1% of casual labour use (see Table 18, which is based on a ‘mid point’ estimate between 4.5 and 5.0 million of 4.8 million days).

**Table 18: Distribution of casual workers in HDC registered businesses**

Turnover band	HDC growers		Casual worker days	
	No.	%	'000	%
Under £50,000	714	26	60	1
£500,000<£100,000	715	26	420	9
£100,000<£200,000	529	19	450	9
£200,000<£300,000	208	8	200	4
£300,000<£500,000	204	7	535	11
£500,000<£1 million	187	7	1,080	23
£1 million<£2 million	115	4	680	14
£2 million+	74	3	1,370	28*
	2,746	100	4,800	100

\*Caution: small base

7.3.21. In terms of crop sector we found substantial differences in the use of casual workers, who are (in proportion to the number of growers) much more likely to be found on growers producing field vegetables and soft fruit than on other holdings.

**Table 19: Distribution of casual workers by crop sector**

Crop sector (to nearest 10 growers)	Estimated no. of growers		Casual worker days	
	No.	%	'000	%
Hardy nursery stock/bulbs and flowers	770	28	530	11
Ornamental protected crops	580	21	290	6
Field vegetables	470	17	2,030	42
Top fruit	380	14	530	12
Edible protected crops	270	8	260	6
Soft fruit	190	7	1,000	21
Others, unclassifiable	170	6	100	2
	2750	100	4,800	100

7.3.22. The distribution of the casual workforce by crop sector has an influence on its regional spread, with above-average concentrations in the East Midlands and, to a lesser extent, the South East. Relative few, apparently, are employed in the South West and North West.

**Table 20: Distribution of casual workers by region**

Region	HDC growers		Casual worker days	
	No.	%	'000	%
South East	764	28	1,500	31
East Anglia	475	17	760	16
East Midlands	369	13	1,100	23
South West	309	11	210	4
West Midlands & Wales	289	11	510	11
North and Scotland	288	10	550	11
North West	252	9	140	3
	2,746	100	4,800	100

#### 7.4. Hours worked: regular personnel

7.4.1. We have earlier distinguished between **full-** and **part-**time principals, supervisors and regular workers. However, the distinction is, in many cases, more apparent

than real, when account is taken of the number of hours put in. We therefore asked for estimates of the actual number of hours worked.

7.4.2. A necessary preliminary was to examine the influence of seasonality on working hours. We therefore asked growers to classify each month of the year into one of three categories: a peak month, a normal one or a slack one. This in itself produced some illuminating responses, which we examine first. Table 21 (below) looks at the proportion of all growers who classified each month as 'peak', 'normal' or 'slack'. In brief it shows:

- That, for growers as a whole, the main **peak months** are April to June.
- That the main **normal months** are February and March as well as September to November.
- That July is about **equally poised** between being a peak and a normal month.
- That the main **slack months** are January and February, while December, although a slack month for many growers, is more busy for most.

**Table 21: Seasonal variations in activity: all growers**

	Peak	Normal	Slack
(base: estimated number of growers)	(2,750)	(2,750)	(2,750)
<b>Month</b>	%	%	%
January	9	29	58
February	13	47	36
March	36	52	8
April	55	36	5
May	63	26	6
June	61	28	6
July	43	41	11
August	36	39	21
September	39	47	10
October	30	51	14
November	17	43	36
December	23	29	44
None	4	4	16
Average, all year	35	39	20

N.B. Percentages add across and may not add exactly to 100 because of 'none' answers.

7.4.3. There are, however, variations between regions and crop sectors (the two are, to some extent, interrelated). The main variations found were:

- In **East Anglia** January and February are particularly low as peak months (averaging about 4% against an overall figure averaging 11%).
- In the **East Midlands**, however, the reverse is the case, an above average 'peak month' figure of 20%.
- In the **South West**, too, January and February are months of above average peak activity, at 18%.

7.4.4. Looking at crop sectors:

- March, and to some extent January and February are above average 'peak' months for growers of **hardy nursery stock** (including bulbs/flowers), averaging 38% (for all growers the corresponding average is only 19%). By contrast, activity drops off

from July to October. While only 20% of hardy nursery stock growers report these as 'peak' months, among all growers it is about double, at 38%.

- For growers of **ornamental and edible protected crops** the peak months are April to June, averaging 83% against an 'all growers' figure of 60%.
- For **field vegetable growers** the pattern of peak activity is more even throughout the year. June to August appear to be the main months of peak activity (averaging 60%) but this is not that much greater than for growers as a whole (47%).
- September is by a long way, the peak month for **top fruit growers** (nominated by 88% as a peak month), though months on either side (August and October) are also busy periods.
- Peak months for **soft fruit growers** are April to June, averaging over 80% (the comparable proportion for all growers is about 60%).

7.4.5. Growers were then asked to estimate the number of hours put in, by themselves and their regular workers, at each period of the year. This enabled us to make a broad estimate of the average weekly hours over the year as a whole<sup>2</sup>.

#### a) Principals

7.4.6. The average full-time 'boss' works a 63-hour week at peak times, about 49 hours during normal times and 39 hours during slack months. Taking account of the approximate distribution of peak, normal and slack months we estimate that, over the year as a whole, he (or she) works an average 50 hour week. For part-time principals the corresponding average is around the 22 hours a week level.

**Table 22: Average hours worked by principals**

(base: estimated no. of principals) <b>Period of the year</b>	All	Full-time	Part-time
	(6,500) Hours/week	(5,300) Hours/week	(1,200) Hours/week
Peak months	57	63	31
Normal months	43	49	19
Slack months	34	39	14
Average, all months	45	50	22

7.4.7. Grossing up this suggests that the 6,500 principals put in a total of close to 300,000 hours a week.

#### b) Supervisors

7.4.8. Applying the same formula to supervisors we estimate that the average full-time supervisor puts in a 50 hour week at peak periods, falling to 38 hours during slack months. Part-time supervisors put in fewer, but not all that many fewer, hours.

**Table 23: Average hours worked by supervisors**

(base: estimated number of supervisors) <b>Period of the year</b>	All	Full-time	Part-time
	(3,800) Hours/week	(2,400) Hours/week	(1,400) Hours/week
Peak months	47	51	40
Normal months	39	42	33
Slack months	32	38	22
Average, all months	38	44	33

<sup>2</sup> It was impractical to ask about each individual, we had to be content with an approximation for all those in a given category. This means that the average quoted by, for example, a grower with 10 full-time workers is accorded the same weight as one with a single employee.

7.4.9. Grossed up this suggests a total weekly input, by all supervisors of about 145,000 hours a week.

**c) Regular workers**

7.4.10. These form the bulk of the regular workforce, with full-time workers averaging a 42 hours week, part-timers 24 hours.

**Table 24: Average hours worked by regular workers**

(base: estimated number of regular workers) <b>Period of the year</b>	All	Full-time	Part-time
	(27,000)	(14,750)	(12,250)
	Hours/week	Hours/week	Hours/week
Peak months	40	48	29
Normal months	33	41	23
Slack months	30	38	19
Average, all months	34	42	24

7.4.11. Grossed up this suggests a total weekly input of about 900,000 hours.

**d) Casual workers**

7.4.12. We did not ask growers for estimates of the number of hours worked per week at different times of the year by casual workers since it is common practice to hire them for the day (or days). Assuming, therefore, that the average casual worker, when employed, puts in a full 8 hour day (many may work longer hours), we estimate that the average number of hours worked, per week, through the year by casual workers is around the 800,000 mark.

7.4.13. However, there are seasonal variations in the use of casual labour and a broad guide to its distribution can be gained from a question we put (and which most employers of seasonal workers answered) about the number of days put in, each month, by these personnel.

7.4.14. We have already estimated (section paras 7.3.17 to 7.3.22) that casual workers put in about 4.8 million days a year (Table 18). Table 25 sets out this distribution by month.

**Table 25: Estimated distribution of casual days by month**

	'000 days	%
January	120	3
February	170	3
March	310	6
April	360	8
May	530	11
June	640	13
July	670	14
August	640	13
September	700	14
October	320	7
November	200	4
December	130	3
	4,800	100
Average, all months	400	

7.4.15. Table 25 demonstrates that, although there are summer peaks in the utilisation of casual workers, it is a year-round requirement for some growers. Indeed, looked at in terms of growers using **any** casual labour, as many as 30% employ it at the seasonal low month of January (in June and July the proportion rises to around the 75% mark).

#### e) Hours worked: summary

7.4.16. Drawing the threads together we estimate that, in the 'average' week, HDC growers and their workers put in a total of over 2 million hours. Table 26 summarises its composition.

**Table 26: Estimated number of hours worked per week**

Status	Number of people	Average hours per week	Total hours	
			No.	%
Principals	6,500	45	290,000	13
Supervisors	3,800	38	145,000	7
Regular workers	27,000	34	920,000	43
Casual/seasonal workers	20,000 <sup>1</sup>	40 <sup>2</sup>	800,000	37
	57,300	38	2,155,000	100

1. Full-time worker equivalent.

2. Assumed average.

### 7.5. Use of time

7.5.1. As important as the amount of time worked is the purposes for which it is used. We therefore sought an estimate of the proportion of time spent on a number of activities by each category of staff. Five main alternatives were offered:

- a) **General managerial duties:** looking after the business as a whole;
- b) **Production supervision:** ensuring standards are maintained, dealing with problems, etc;
- c) **Routine maintenance:** generally keeping things in good working order;
- d) **Seasonal peak work:** planting, potting up, harvesting, grading, etc;
- e) **Marketing and selling:** including distribution.

Space was left for 'other activities' but it was not often used and when it was the answers could generally be reclassified into one of the 'preset' headings.

7.5.2. Across all grades of staff the answers generated a large number of analyses. This section focuses on the main findings.

#### a) Principals

7.5.3. Looking after the business as a whole absorbed the highest single proportion of the 'average' principal's time. However, having 'hands on' involvement in crop production took up, cumulatively, about half his (or her) time. Only about a tenth of his (or her) time was spent on marketing, selling or distributing the produce.

7.5.4. 'Small' growers (under £100,000) spent below average time on general managerial duties, but more on 'hands on' tasks. Among larger growers (from £100,000 up to about £500,000) anything from 40% to 60% was absorbed by managerial duties. However, among larger businesses this fell a little (to just over 50%). Their principals tended to spend more time on production supervision. Surprisingly,

perhaps, the principals of large (£500,000+) businesses spent a little below average time on **marketing and selling**, though there were, of course, more of them.

**Table 27: Time spent on duties by principals**

	All principals	Turnover band			
		<£100,000	£100,000 <£200,000	£200,000 <£500,000	£500,000+
(Approx. no. of businesses)	(2,750)	(1,430)	(530)	(410)	(380)
<b>Average time spent on:</b>	%	%	%	%	%
a) General management	39	30	41	45	60
b) Production supervision	13	11	14	17	19
c) Routine maintenance	8	10	9	6	4
d) Seasonal peak work	17	22	17	11	4
e) Marketing and selling	12	14	13	10	8
f) Other answers, not answered*	11	13	6	11	5
	100	100	100	100	100

\* These included some growers whose answers added to less than 100%.

### b) Supervisors

7.5.5. As one would expect, the highest proportion of supervisors' time is spent on **production supervision**: about 35%. Next comes seasonal peak work, at approximately 25%.

7.5.6. There are quite sharp differences in the use of supervisory labour by business size. Among many growers the term 'supervisor' is often more apparent than real, since as much or even more time is spent on seasonal peak work than on production supervision. We also found that part-time supervisors are less likely to spend time on production supervision (it only accounts for 27% of their average working day) than their full-time counterparts (for whom the corresponding figure is 37%). Although marketing and selling was a minor call on supervisors' time for the 'average' grower, it was a quite important use of their time among 'small' growers reflecting, no doubt, time spent in the retail shop or delivering produce.

**Table 28: Time spent on duties by supervisors**

	All with supervisors	Turnover band			
		<£100,000	£100,000 <£200,000	£200,000 <£500,000	£500,000+
(Approx. no. of growers who employ supervisors)	(1,070)	(320)	(230)	(240)	(280)
<b>Average time spent on:</b>	%	%	%	%	%
a) General management	8	16	8	7	7
b) Production supervision	35	22 <sup>1</sup>	31	35	50
c) Routine maintenance	15	15	14	14	15
d) Seasonal peak work	25	24	32	29	20 <sup>2</sup>
e) Marketing and selling	8	16	12	5	2
f) Other answers, not answered*	8	7	3	10	6
	100	100	100	100	100

1. Among growers below £50k this figure was a mere 14%.

2. Among the small number of growers above £2 million this figure was 13%.

### c) Regular workers

7.5.7. The principal utilisation of regular workers is for seasonal peak work accounting for an average of about 60% of their time. Next most important was routine maintenance, at 15%. Not surprisingly, little time is spent on managerial or supervisory duties, though for completeness these are included in Table 29 below.

**Table 29: Time spent on duties by regular workers**

	All with regular workers	Turnover band			
		<£100,000	£100,000 <£200,000	£200,000 <£500,000	£500,000+
(Approx. no. of growers who employ regular workers)	(2,220)	(1,00)	(470)	(390)	(360)
<b>Average time spent on:</b>	%	%	%	%	%
a) General management	3	3	3	2	3
b) Production supervision	3	3	3	2	3
c) Routine maintenance	15	15	17	14	16*
d) Seasonal peak work	61	55	65	63	64
e) Marketing and selling	7	12	5	5	2
f) Other answers, not answered*	11	12	7	14	8
	100	100	100	100	100

\* Among businesses in the £500,000<£1 million band the average was 20%, among larger growers it was almost halved at 11%.

### d) Casual/seasonal workers

7.5.8. When asking about the utilisation of casual workers we shortened the options to four: pre-harvest preparatory work, harvesting itself, post-harvest work (packing, grading, etc) and 'other' jobs. Among those employing casual workers the average distribution was:

- 35% of time spent on pre-harvest work;
- 45% on harvesting;
- 14% on post-harvest work (cleaning, grading, packing, etc).

The remaining 6% was spent on other jobs or was not specified.

7.5.9. There were, however, differences in the nature of the work done by casual workers reflecting, in part, the principal crops grown and the level of use of casual workers. These are set out in Table 30.



**Table 30: Time spent on duties by casual workers**

(base: estimated number of growers employing casuals: 1,800)	Type of work		
	Pre-harvest	Harvest	Post-harvest
	%	%	%
Average: all employing casuals	35	45	14
<b>Crop sector</b>			
Hardy nursery stock/bulbs, flowers	51	30	16
Ornamental protected crops	55	19	14
Edible protected crops	26	54	15
Field vegetable	21	52	24
Top fruit	12	81	5
Soft fruit	15	69	10
Others, unclassifiable	28	40	21
<b>Level of use of casuals</b>			
Under 100 days	52	30	10
100<1,000 days	39	39	14
1,000+ days	21	60	17
Use, but days not specified	31	44	12

N.B. Percentages add across and total less than 100% because of nominations of other types of work or types not specified.

Definitions: **Pre-harvest** includes preparatory work such as weeding, thinning, potting up, watering, etc.

**Harvesting** includes picking, cutting, collecting, etc.

**Post-harvest** includes packing, grading, processing, etc.

## 7.6. Rates of pay

7.6.1. Total labour costs are, of course, a function of the number of hours worked and the rate of pay for these hours. Pay rates are a complicated subject, affected by the type of work, the times at which it is undertaken, minimum rates set by the Agricultural Wages Board, competition from other employers and, as some growers observed, a benefits system which they felt reduced the incentive to seek work. It is also a subject about which many growers regard as highly confidential.

7.6.2. These issues apart, assessing rates of pay presented a technical problem. Many growers employ a number of staff each, perhaps, on a different pay scale. It was, however, impracticable to ask them to specify how much each one earned. We had, therefore, to rely on them to estimate an 'average' rate for different grades. In this section, therefore, we are dealing with 'best estimates' rather than precise figures.

7.6.3. We approached the subject of pay on two fronts:

- a) We asked, for supervisors, regular and casual workers, for estimates of the average **basic** hourly rate and of the **total** rate, after adding overtime, bonuses, etc. For casual workers supplied by agencies rather than directly employed we also asked for average **daily** payments (including any agency fees but excluding VAT).
- b) For managers, supervisors, and regular workers we also invited estimates of average annual pay levels.

**a) Hourly rates**

7.6.4. Table 31 sets out the average hourly rates of pay reported by growers employing each category of worker.

**Table 31: Estimated average rates of pay**

		Basic	Total
		£/hour	£/hour
Supervisors	: full-time	8.10	8.80
	: part-time	6.80	7.40
Regular workers	: full-time	6.20	7.10
	: part-time	5.70	6.00
Casuals	: employed by grower	5.30	5.90
	: agency supplied	51.40 (per day)	

7.6.5. While there were variations about these averages (we even recorded a few growers apparently paying below the AWB minimum rate at the time of the survey), variations in the average payments by crop sector or turnover band were not very marked.

- For **full-time supervisors** (overall average basic rate about £8.10 per hour) the lowest average recorded was by growers in the South West (£7.20), though by a sample of only 23 growers while the highest average was £8.60, reported by growers in the £500,000-£1 million turnover band.
- For **full-time workers** (overall average basic rate £6.20) the variation was much smaller, ranging from £6.10 to £6.40 per hour.
- There was an even smaller variation for **casual workers**, where average basic pay rate hardly varied at all by sector. However, those buying agency workers by the day did pay above average (at about £60/day) if they ‘bought in’ less than 100 days of casual labour, than if they used 1,000+ days (average about £49).

**b) Annual salaries**

7.6.6. Not all growers employing managers, supervisors or casual workers chose to answer a question about the average annual pay for these categories of staff – and some who did not, apparently employ them did give an estimate, presumably about what they would expect to pay, or had paid in the past. The outcome was that varying numbers responded to each staff category. In what follows our analyses are based on the numbers who **did** provide an estimate.

7.6.7. There is evidence that growers in the higher turnover bands are more generous payers.

**Table 32: Annual pay for regular staff**

	Managers		Supervisors		Workers	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
(No. of respondents) (base: estimated no. of HDC growers)	(211) (920)	(33) (140)	(233) (1,020)	(49) (220)	(349) (1,550)	(297) (1,350)
Average, all growers	£ 23,400	£ 10,600	£ 17,600	£ 8,400	£ 13,900	£ 6,300
<b>Turnover band</b>						
<£100,000	17,700	n.a.	16,000	n.a.	13,000	5,400
£100,000<£300,000	21,500	n.a.	16,500	n.a.	14,000	6,400
£300,000<£500,000	26,800	n.a.	17,700	n.a.	14,300	8,500
£500,000<£1 million	27,500	n.a.	20,100	n.a.	14,800	7,500
Over £1 million	30,000	n.a.	19,800	n.a.	15,000	7,200

N.B. The base for each turnover band ranges from about 40 to over 100 growers.

n.a. = base too small to calculate mean with any confidence.

7.6.8. Of course, differences in average annual salaries may reflect differences in hours worked or responsibilities held, as well as 'ability to pay'.

### 7.7. Benefits in kind

7.7.1. Fringe benefits, especially the provision of housing, are a feature of British agriculture. We therefore asked growers a couple of questions on this subject. One dealt with benefits enjoyed by regular employees (directors, managers, supervisors and regular workers), the other with those accorded to casual workers.

7.7.2. Although we specifically asked growers to exclude any benefits accruing to the **owners** of the business it seems likely that many **did** include themselves (there were entries in the "managers" column on the questionnaire when in fact no managers were employed). However, many others excluded themselves. The outcome was that, so far as the responses relating to directors and managers were concerned, the evidence from the survey is less reliable than we had hoped. However, the same problem did not occur when dealing with fringe benefits applied to **other** classes of worker. Table 33 below sets out our 'best estimates' for **each** category.

**Table 33: Benefits in kind**

	Directors/ Managers	Supervisor s	Regular workers	Casual s
(Estimated no. of growers employing each category)	(800)	(1,070)	(2,220)	(1,800)
<b>Benefits</b>	%	%	%	%
Pension scheme	44	29	15	-
Housing	26	16	18	28
Transport	33	11	8	18
Health insurance	5	3	1	-
Meals	4	2	3	3
Others	3	2	2	3
None	27	56	65	67

7.7.3. Almost all the 'benefits in kind' – especially pension scheme membership – were enjoyed by levy payers. Very few registered growers identified any benefits.

### 7.8. Recruitment problems

7.8.1. Growers were invited to assign a mark, from 0 to 10, reflecting their experiences in recruiting staff: 0 representing 'very easy indeed' and 10 'extremely difficult'. Again, not all growers employing a particular category made an assessment and some who did not employ anybody in that category chose to express an opinion. Set out in Table 34 are the assessments of those who did respond to the question.

**Table 34: Ease of recruitment of personnel**

	Average mark (maximum 10)
Managers : full-time	8.2
: part-time	7.6
Supervisors : full-time	7.6
: part-time	7.1
Workers : full-time	6.4
: part-time	5.7

7.8.2. Although there were some differences in emphasis between categories of grower, these were not very marked. On the evidence of this table the main problems of recruitment seem to be of full-time, experienced and/or qualified, managerial or supervisory staff.

7.8.3. We then went on to ask growers to identify, from a pre-selected list, the main problems they encountered in recruiting different categories of employee. The main problems identified were:

- **shortage of appropriate skills**, particularly when trying to recruit managers;
- **inability to compete on wages**, particularly where workers are concerned;
- **lack of opportunities for promotion**, an across-the-board problem;
- **poorer working conditions**, especially for workers;
- **the nature of the work**, seen as being too physically demanding, especially for workers;
- a major concern for employers of casual workers in that they often **fail to turn up**.

Other important problems were the availability of other jobs in the area and housing shortages. Table 35 gives full details and includes additional, spontaneous remarks added to the list provided.

**Table 35: Recruitment problems**

	Managers	Supervisors	Regular workers	Casuals
(base: estimated no. of growers employing each category)	(1,020)	(1,070)	(2,220)	(1,800)
<b>Problems nominated</b>	%	%	%	%
Shortage of appropriate skills	<b>55</b>	47	32	18
Cannot afford to compete on wages	35	37	<b>44</b>	25
Other employers offer easier working conditions	26	32	<b>41</b>	24
Work is too hard, physically demanding	19	29	<b>45</b>	33
Cannot offer prospects for promotion	29	29	28	17
Plenty of other jobs in area, so hard to find staff	19	28	<b>34</b>	23
Shortage of housing for workers who need to move into the area	23	26	21	15 <sup>1</sup>
People have transport problems getting to work	4	6	<b>17</b>	10
Unfashionable, poor image of horticulture <sup>2</sup>	3	5	5	-
Unable to offer regular employment	n.a.	n.a.	n.a.	<b>32</b>
Labour is often unreliable, doesn't turn up	n.a.	n.a.	n.a.	<b>27</b>
Have language problems with foreign workers	n.a.	n.a.	n.a.	13
Red tape, bureaucracy <sup>2</sup>	-	-	-	1
NO PROBLEMS, NO ANSWER GIVEN	19	16	17	11

1. This was rephrased for casual workers as 'having problems in finding accommodation'.

2. Spontaneous 'other answers' given.

### 7.9. The casual workforce

7.9.1. The use of casual/seasonal workers is so important to British horticulture that, apart from dealing in numbers employed and wages paid, we asked a number of additional questions about them. This section summaries our findings.

#### a) Sources of recruitment

7.9.2. Among all growers using casual workers the main source used to recruit casual workers is word-of-mouth (36%). Next comes the Seasonal Agricultural Workers Scheme (SAWS) at 27%. Gangmasters, the subject of much opprobrium in the media, are a main source for only 10%. However, these averages are somewhat misleading: SAWS, gangmasters and other agency-supplied personnel are particularly important to growers using large numbers of casuals.

**Table 36: Main sources of recruitment for casual workers**

	All users	Level of use (days a year)			
		<100	100<1,000	1,000+	Not stated
(base: actual no. of interviews)	(402)	(60)	(162)	(131)	(49)
(estimate number of growers using)	(1,800)	(280)	(740)	(560)	(270)
<b>Main source</b>	%	%	%	%	%
Word of mouth	36	54	46	20	22
SAWS or similar agencies	27	8	18	46	34
Gangmasters	10	10	7	15	12
Employment agencies	9	7	11	12	4
Job centres	5	3	7	4	5
Advertising	4	2	6	2	4
Others, not stated	8	15	5	1	19

7.9.3. Among **other sources** used in the past three years, among all using casual workers the main nominations were:

- Word-of-mouth: 30%
- Employment agencies: 8%
- Job centres: 7%
- Gangmasters: 7%
- SAWS: 6%
- No other sources: 48%

**b) Areas from which drawn**

7.9.4. Most growers recruit at least some of their casual workers from people living in their local area (defined as being within about 20 miles of the grower's business). Next comes those whose workers live overseas. Dependence on overseas workers is greatest among larger growers; field vegetables, top and soft fruit producers.

**Table 37: Areas from which casual workers drawn**

(base: estimated users of casual workers: 1,800)	Residence of casuals		
	Local area	UK, but further away	Abroad
	%	%	%
Average, all growers	73	19	46
<b>Turnover band</b>			
Under £50,000	80	6	20
£50,000<£100,000	76	17	31
£100,000<£300,000	70	13	45
£300,000<£500,000	71	33	65
£50,000<£1 million	60	18	68
£1 million+	61	42	64
<b>Crop sector</b>			
Hardy nursery stock/bulbs, flowers	81	15	25
Ornamental protected crops	85	7	21
Edible protected crops	65	7	48
Field vegetables	59	33	60
Top fruit	71	27	67
Soft fruit	64	22	81
Others, unclassified	69	10	59

N.B. Many drew labour from more than one source.

**c) Country of origin**

7.9.5. An estimated 800 or so HDC growers employed at least some casual workers from abroad in the past year. Most came from Eastern Europe, with Poland the principal nomination.

**Table 38: Country of residence: overseas casual workers**

(actual no. of respondents)	(188)
(base: estimated no. of growers)	(820)
<b>Country of residence</b>	%
Poland	54
Latvia/Lithuania/Estonia	28
Russia/Ukraine/Belarus	25
Hungary/Romania/Bulgaria	20
Czech Republic/Slovakia	14
Elsewhere in Eastern Europe	13
Western Europe, other countries	10
Not stated	19

N.B. Many nominated more than one country as the source of their casual workers.

**d) Sex and age group**

7.9.6. Among growers employing casual workers a majority (57%) were estimated to be male. The estimated age distribution was:

- under 21: 18%
- 21-34: 46%
- 35-54: 22%
- 55+: 11%

A small number of growers (3%) did not provide an estimate.

**e) Gangmasters**

7.9.7. We have noted that about 10% of growers who use **any** casual workers rely mainly on gangmasters for their casual labour. Asked to estimate how dependent they were on this source, the 'average' grower put the figure at just below the 60% mark. This did not vary much by the total number of casual worker days used:

- Average among all using gangmasters: 57%
- Use under 1,000 'casual days' a year: 62%
- Use 1,000+ 'casual days' a year: 56%
- Use but did not specify number of casual days: 50%

Based on these responses it seems feasible that, overall, gangmasters only supply about 6% of the total casual labour used by HDC growers.

**f) Contract services**

7.9.8. Contracting has become a common feature of agriculture. It has penetrated horticulture, but to only a limited extent:

- 14% of growers said they 'bought in' contract services. Use peaked at 31% among field vegetable growers and was above average (at about the 20% mark) among top and soft fruit producers;
- Among the small number of those buying in (estimated at fewer than 400 of the 2,750 HDC-registered growers) most made very modest use of contract services: two-thirds used under 100 days. However, the average number of days bought in, at 150, was heavily affected by only 3 growers who each bought in over 1,000 days (one of them bought in 3,000 days). When weighted up their influence on the average was substantial and unrepresentative of users as a whole. This distorting effect was repeated when we asked about expenditure on contract services – 70% of growers said they spent less than £10,000 on them. However, no more than a handful who claimed to spend over £50,000, brought the 'average' expenditure per head to over £13,000, a figure which, if grossed up, amounts to over £5 million.

In Table 39 we set out the main findings.



**Table 39: Contract services bought in: profile of users**

	Approx. sample base	Estimated no. of users		Days bought in		Estimated expenditure	
	No.	No.	%	No.	%	£'000	%
<b>Turnover band</b>							
Under £100,000	33	160	41	4,000	7	600	11
£100,000<£500,000	29	130	33	11,000	18	1,000	19
Over £500,000	25	100	26	45,500	75	3,700	70
	87	390	100	60,500	100	5,300	100
<b>Crop sector</b>							
Nursery stock, protected crops	21	100	26	10,000	17	600	11
Field vegetables	33	150	38	3,900	64	3,700	69
Top and soft fruit	29	130	33	10,000	17	1,000	18
Others, not stated	4	20	5	1,500	2	100	2
	87	390	100	6,500	100	5,300	100

7.9.9. Based on this evidence the average 'contractor day' costs his grower-customer about £85.

7.9.10. Some growers also provide contract services. However, at about only 6% this is only a small minority. Again, we had the distorting effect of (in this case) two growers claiming to earn £500,000 a year from, in each case, the sale of only 300 days' work. This means that, apparently, they were able to charge out at about £1,666 a day! Unfortunately, we had no means of checking these claims. However, to avoid unduly distorting the analysis these were scaled down to a more realistic (though possibly still generous) earning level of £30,000 each. On this basis we estimate that the total number of days 'sold' was around the 12,000 mark, generating an income of somewhere between £1,000,000 and £2,000,000.

7.9.11. In **net terms**, therefore, we estimate that HDC growers buy in around 48,000 days of contractor-supplied work, at a net cost of around £4 million.

#### 7.10. Qualifications: possessed and required

7.10.1. Growers were invited to identify, from a prepared list (with the facility to add to it) the qualifications they and their personnel already have and any others they would like to be able to draw on. Again, not all growers chose to answer either (or both) questions, but the most commonly-mentioned qualification was the possession of **proficiency certificates** (in, for example, crop spraying, rodent control, operating fork lifts, etc). Possession of such certificates was claimed by almost all growers whose turnover band was at, or above, £300,000. By contrast, almost half the growers in the turnover band £25,000<£50,000 had **no** formal qualifications at all. Nor did the vast majority of them identify any qualification they wanted. Table 40 and Table 41 provide details.

**Table 40: Qualifications possessed by employers and their personnel**

	All growers	Turnover band				
		<£50,000	£50,000< £100,000	£100,000< £200,000	£200,000 <£300,000	£300,000 +
<b>Qualifications possessed</b>	%	%	%	%	%	%
Proficiency certificates	64	40	62	63	73	95
Degree/diploma in hort/agriculture	42	30	35	41	46	65
Degree/diploma in business management	14	8	7	18	5	29
Specific professional qualifications	8	6	5	6	5	18
Others	4	2	4	5	5	4
None nominated	27	47	30	26	17	3

N.B. There were multiple answers.

**Table 41: Additional qualifications required for themselves and/or employees**

	All growers	Turnover band				
		<£50,000	£50,000< £100,000	£100,000< £200,000	£200,000 <£300,000	£300,000 +
<b>Qualifications required</b>	%	%	%	%	%	%
Proficiency certificates	22	6	24	23	41	31
Degree/diploma in hort/agriculture	7	4	4	7	12	14
Degree/diploma in business management	3	1	2	3	-	9
Specific professional qualifications	2	1	3	1	-	6
Others	2	2	2	4	2	1
None nominated	72	90	72	68	56	62

7.10.2. Although relatively small in number the growers in our sample in the £2 million+ turnover band seem to particularly value **specific** professional qualifications (e.g. in accounting, law, personnel management).

7.10.3. We also invited growers to identify, in their own words, any (other) skills from which they thought their business would benefit, 87% proffered no additional comments and some of the remainder reiterated responses already made when asked about qualifications required. The few who did respond identified two main requirements:

- Skills reflected in **personal qualities**: ability to tackle and resolve problems, manage people, knowledge of plant production, etc.
- **More specific skills** such as knowledge of languages, legal proficiency, knowledge of Health and Safety regulations, proficiency certificates, sales and marketing skills...even possession of a driving licence.

### 7.11. Key issues

7.11.1. This was another 'open' question, this time inviting growers to identify any key issues they felt to be most important in affecting employment in horticulture and the future of their businesses. The question evoked responses from about half the growers who nominated at least **one** issue identifying, between them, a wide range. Prominent among them:

- Concerns about the effects of pressures on margins (for which supermarkets were usually held responsible) which restricted the grower's ability to improve rates of pay. About 14% of growers referred to this as a key issue.
- The imposition of (unnecessary) bureaucratic procedures (red tape) was also commonly nominated, along with perceived inequities in the taxation system (for casual workers). Again, about 14% identified these problems. Specifically, 2% called, unprompted, for the abolition of the Agricultural Wages Board.
- The nature of the industry itself and its image: its dependence upon casual labour, the lack of opportunities for career development, the physical demands of the work itself, long and unsocial hours, the lack of a career structure, perceptions of low wages. Issues such as these were nominated by about 9% of growers.
- Attitudes towards horticulture (and work in general) as being unattractive (bolstered, to some extent, by the educational system) in a society in which incentives to work are undermined by a generous state benefit system. This attracted comments from about 3% of growers.
- Purely practical difficulties in recruiting workers (full-time, part-time or casual workers) occasioned, perhaps, by the nature of the work and wage levels: nominated by about 3%.

Numerous other issues were mentioned, a selection being:

- ... a skills shortage, especially among new entrants;
- ... the need to improve efficiency, especially productivity;
- ... the need for investment in technology;
- ... the alleged lack of support for British horticulture compared with its overseas competitors;
- ... uncertainty about the future of the business.

However, also frequently mentioned was the dependence on casual seasonal workers and, in particular, the need to retain the supply of overseas casual labour in general and the Seasonal Agricultural Workers Scheme in particular (3% specifically referred to the value of SAWS).

### 7.12. Additional background information

7.12.1. In the report we have made use of background information (turnover band, principal crops, region, etc) as a means of identifying differences between growers in the size and composition of the workforce. In this section we examine some additional information collected at the end of the questionnaire.

**a) Total value of sales**

- 7.12.2. Reference has already been made to the distinction between turnover band and total sales value. Not only does the turnover band exclude 'allowable expenses' involved in crop production but also, of course, sales which do not qualify for levy. In our analyses we made use of turnover band as a main analysis variable because it was the only one, about all HDC growers, available to us (the turnover band was printed on the questionnaire) and is the best guide to the approximate value of the growers' crop production.
- 7.12.3. We did, however, also ask growers for an estimate of the **total value of their sales** of horticultural produce over the preceding 12 months. Their answers (a large majority) revealed, often quite substantial differences between the band in which they fell and the total sales value reported. For example, we had two respondents in the 'under £50,000' band who reported total sales, respectively, of £1.8 million and £2.5 million. Examination of the questionnaires (what appeared to be major discrepancies of this kind were manually checked) revealed perfectly feasible explanations: crop production was only a minor element in a large horticultural business. It is, perhaps, worth adding that **some** growers reported their sales **below** the turnover band they were in. That in providing total annual sales data, many – probably most – growers included **all** 'horticultural' sales (and, perhaps, some that are not, strictly speaking horticultural) is evidenced in Table 42.
- 7.12.4. On this evidence the grossed-up value of sales of HDC registered growers is about £1.9 billion. However, this average is very much influenced by a small number of **very large** businesses. If, for example, we exclude those who reported annual sales of over £500,000 (about 22% of all growers) the average annual sales of the remaining large majority of growers drops to around the £120,000 mark.

**Table 42: Total value of sales**

	Levy band							
	All growers	Under £50,000	£50,000< £100,000	£100,000< £200,000	£200,000 < £300,000	£300,000< £500,000	£500,000< £1m	£1m+
(No. of respondents)	(600)	(144)	(151)	(116)	(41)	(55)	(47)	(46)
(base: estimated no. of growers)	(2,746)	(714)	(715)	(529)	(208)	(204)	(187)	(189)
<b>Total sales</b>	%	%	%	%	%	%	%	%
<£50,000	17	46	15	3	2	4	-	-
£50,000<£100,000	14	28	25	3	-	-	-	-
£100,000<£200,000	22	13	39	41	5	2	6	2
£200,000<£350,000	14	6	9	34	34	11	-	-
£350,000<£500,000	7	1	3	9	32	16	2	-
£500,000<£1m	8	-	2	4	17	40	39	2
£1m<£2m	8	1	1	2	4	20	38	36
£2m<£5m	4	1	-	1	-	4	13	40
Over £5m	2	-	-	-	-	2	-	21
Not answered	4	6	7	3	5	2	2	-
	100	100	100	100	100	100	100	100
Average	£655,000	£103,000	£143,000	£272,000	£430,000	£1m	£1.1m	£4.9m

\* = below 0.5%

**b) Employment costs**

7.12.5. We approached the subject of employment costs from three directions:

- the reader will already have noted, in sections 7.3 to 7.6, that we established the numbers employed, hours worked and rates of pay for workers (excluding principals). By combining these data we are able to arrive at an approximation to the total costs, to growers, of these workers;
- we also asked for a direct estimate of the total annual cost of employing specific categories of personnel;
- finally, at the end of the questionnaire we asked growers for an estimate of their total employment costs.

In doing so, we expected to find differences between the estimates: their value is that they are indicative of the **range** of costs for this important element in total costs.

7.12.6. We begin with estimates compiled by relating numbers employed, hourly rates of pay and hours worked. Table 43 which relates only to supervisory staff and workers, provides our first estimate.

**Table 43: Estimated employment costs of supervisors and workers**

Category	No. employed	Av. hourly pay	Av hrs/week	Total est. cost
	No.	£	hrs	£m
Supervisors : full-time	2,900	8.80	44	60
: part-time	900	7.40	33	10
Regular workers : full-time	14,750	7.10	42	230
: part-time	12,250	6.00	24	90
Casuals: full-time equivalent	20,000	5.90	40*	245
	50,800	6.50	37	635

\* Assumed average.

7.12.7. The second asked growers to estimate the average annual cost of employing managers, supervisors and regular workers. We did not ask principals how much they paid themselves but, making the not-unreasonable assumption that this would be broadly similar to that of managers, this resulted in a grossed up total just short of £500 million.

**Table 44: Annual average pay for managers, supervisors and workers**

	No. employed	Average pay	Total est. cost
		£/annum	£m
Managers/principals : full-time	5,250	23,400	125
: part-time	1,250	10,600	15
Supervisors : full-time	2,900	17,600	50
: part-time	900	8,400	10
Regular workers : full-time	14,750	13,900	205
: part-time	12,250	6,300	80
	37,300	13,000	485

7.12.8. Adding in an allowance for casuals of £245 million this total, which **includes** principals, totals £730 million. Estimates for other workers are a little lower than those arrived at in Table 43 but they are in the same ballpark, especially when allowance is made for the fact that not all growers provided these data.

7.12.9. The third measure asked simply for an estimate of the total cost of employment to the business in the past year. While most growers provided an estimate it was apparent, from a comparison of the figures with earlier evidence about numbers employed and wage rates, that many growers had made no allowance for their own drawings: presumably they did not consider themselves employed by the business. Where it appeared clearly to be the case that no allowance had been made we added a notional allowance for such remuneration. This varied, to some extent, with the size of the business but a typical addition was £20,000 for a full-time principal and £10,000 for a part-timer. However, not all cases were so apparently clear-cut and we had the impression that if anything, the real cost of employment was more likely to be under- rather than over-stated.

7.12.10. Averaged over all growers the annual cost of employment worked out at approximately £225,000 (this assumes that the 'not answers' were not significantly different from those who **did** provide estimates. Grossed up, this amounts to about £620 million, the lowest of the estimates.

**Table 45: Total employment costs**

	£'000
Average all growers	225
<b>Turnover band</b>	
<£50,000	40
£50,000<£100,000	60
£100,000<£200,000	95
£200,000<£300,000	180
£300,000<£500,000	330
£500,000<£1 million	470
£1million+	1,380
<b>Main crop</b>	
Hardy nursery stock/bulbs, flowers	230
Ornamental protected crops	110
Edible protected crops	180
Field vegetables	490
Top fruit	90
Soft fruit	260
Others, unclassifiable	160

**c) The relationship between sales and employment costs**

7.12.11. This varied, often quite widely, from business to business reflecting, *inter alia*, the nature of the activities undertaken and the extent to which components of sales and labour costs were included in the figures recorded by growers. However, we can present a 'broad brush' account of the relationship.

7.12.12. We have noted (in 7.12.4) that 'grossed up' sales from HDC registered growers amount to approximately £1.9 billion. Estimates of employment costs put these at between somewhat over £600 million to somewhat over £700 million. Of this range we are inclined to believe that the higher of these figures is the more accurate. If, therefore, we assume employment costs to growers (excluding fringe benefits) are approximately £700 million this is about 39% of total costs. This does, however, vary from sector to sector, as Table 45 demonstrates.

**Table 46: Sales and employment costs**

	Sales last year	Employment costs	Employment as % of sales
	£'000	£'000	%
Average, all growers	655	255	39
<b>Turnover band</b>			
<£50,000	100	40	40
£50,000<£100,000	140	60	40
£100,000<£200,000	270	95	36
£200,000<£300,000	430	180	42
£300,000<£500,000	1,000	330	33
£500,000<£1 million	1,100	470	43
£1million+	4,900	1,390	28
<b>Main crop</b>			
Hardy nursery stock/bulbs, flowers	530	230	44
Ornamental protected crops	290	110	38
Edible protected crops	540	180	33
Field vegetables	1,790	490	27
Top fruit	250	90	36
Soft fruit	620	260	42
Others, unclassifiable	420	160	38

**d) Organic production**

7.12.13. Because organic production might involve more intensive use of labour than conventional husbandry we included a question about its adoption. However, since only 6% of growers said they produced organic crops (and these were by no means wholly organic) the base was too small to warrant further analysis. While too few in number to analyse separately organic producers are included in all our analyses.

**e) Other 'added value' enterprises**

7.12.14. Apart from growing crops, many are engaged in other activities, almost all post-harvest:

- 39% were engaged in **wholesaling** (51% among growers of hardy nursery stock).
- 35% sold at least some produce **direct to retailers** (in the South West this rose to 45%, among soft fruit growers it was 44%).
- 25% were engaged in **on-farm packing** (around 40% among growers in the £500,000+ levy band and over 40% among producers of field vegetables (42%), edible protected crops (46%) and soft fruit (49%)).
- 20% had a **nursery shop**. This was particularly popular among growers in the under £50,000 band (35%) and ornamental protected crop growers (43%).
- 13% had a **farm shop**: most popular among levy payers in the £50,000<£100,000 band, among soft fruit growers (56%) and top fruit producers (27%).
- 10% had a **market stall**: 14% among growers in the under £100,000 band and very common (34%) among soft fruit producers.
- 7% were engaged in **processing**. Among major levy payers (£1 million+) this was around the 20% mark.
- Other activities nominated were **mail order sales** (7%), landscape contracting (6%), and **box delivery of produce** and **pick-your-own** operations (1% each).



## TECHNICAL APPENDIX

### 1. Design constraints

This survey, believed to be the first attempt to examine in detail the size and composition of employment among HDC registered growers, most of whom are levy payers and accepted as responsible for the bulk of horticultural production in Britain, was challenging. Especially because:

- Account had to be taken of **substantial variations in the size and activities of HDC-registered growers**. Many have, after allowable expenses, sales of horticultural produce as low as £25,000 a year. A few are a hundred times larger. Many employ few, if any, people other than themselves (and even then they often don't consider themselves to be in employment). Some employ a core staff of managers, supervisors and workers supported by a large 'casual' workforce. Many run small retail nurseries selling most of their produce on site; some have large operations, which pack and distribute, not only their own produce but that of other growers, based at home and abroad. Some grow, essentially only a single crop; others a wide range. These, and other factors, have an important influence on their need for, and use of, labour.
- An attempt had to be made, within the confines of a single survey, to **identify and reflect the importance of seasonality** on the demand for (especially casual) labour. This meant seeking employment information over the whole year, not just at the time of the survey.
- **The survey was voluntary**. Growers did not have to take part and even if they chose to do so, they did not have to answer all the relevant questions.
- **The survey was confidential**. The consultants did not have access to the names and addresses of HDC registrants, though to preserve anonymity the questionnaires were returned directly to them; thus the HDC does not know the identities of any respondents. However, this also handicapped the consultants, who had no means of checking any omissions or apparent inconsistencies directly with the responding growers. The only information we had on the questionnaire itself were printed codes identifying the levy status of a grower (registered only, levy payer), if a levy payer the turnover band within which his levy fell and the county from which the annual (levy) return was made.
- For practical reasons the **survey was conducted by post**. While supported by explanatory notes, the responses to the questions asked were dependent upon the growers' perceptions of what was required. While it is possible to submit survey samples to tests of the level of confidence that the reader may have in the statistical variability of the answers, they do not test for the accuracy of the answers themselves.

### 2. Methodology

All registered growers on the HDC's books for 2004/05 were encouraged to take part in the survey, which was trailed in the HDC's monthly newsletter and supported by the NFU, the HTA and other grower bodies. The questionnaire itself, and accompanying explanatory notes, were developed by Howard Biggs, consultant to GBC Ltd to a brief prepared by the HDC and piloted among a small number of growers before being mailed towards the end of September 2005.

Although growers were asked to return the questionnaires within a three week period it soon became apparent that, for some growers, this was too short a time period and the deadline was extended to early December, by which time exactly 600 analysable questionnaires had been returned, plus a number of other returns which, for one reason or another, could not be analysed.

It has to be said that not all the ‘analysable’ questionnaires were entirely complete: in some cases parts of the questionnaire were not answered. However, we had sufficient information to include them in the majority of the analyses.

Details of the response rate and comparisons between participants and the characteristics of all HDC registered growers will be found in the main text (see para 4) so need not be repeated here.

### 3. Rejected questionnaires

Just under 50 responses were made which, for one reason or another, could not be included in the analyses. Most ‘rejects’ were from registered-only growers. The reasons for exclusion were:

	<b>Registered growers</b>	<b>Levy payers</b>
Blank questionnaires returned	7	1
Incomplete return, pages missing	4	1
Do not employ labour, there survey not relevant*	5	11
About to cease, have ceased trading, retired	6	1
Don’t want to take part in survey	5	1
Other reasons (clarity, no employers college, land leased out, etc)	4	1
Too late for inclusion	<u>1</u>	<u>1</u>
	<u>32</u>	<u>17</u>

\* These comprised mainly growers who said they employed nobody (they did not think of themselves as being employed by the business) and about six who grew vining peas under contract, supplying only the land.

### 4. Region

The regional distribution of the sample is not the same as that employed by DEFRA and was designed to provide as reasonably-balanced a sample distribution as feasible given the concentration of horticulture in some parts of Great Britain. The distribution was as follows:

<b>South East</b>	Bedfordshire, Berkshire, Buckinghamshire, East Sussex, Hampshire, Kent, Middlesex, Oxfordshire, Surrey, West Sussex, Isle of Wight
<b>East Anglia</b>	Cambridgeshire, Essex, Norfolk, Suffolk
<b>East Midlands</b>	Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire
<b>South West</b>	Cornwall, Devon, Dorset, Gloucestershire, Somerset, Wiltshire
<b>West Midlands and Wales</b>	Herefordshire, Shropshire, Staffordshire, Warwickshire, Worcestershire, Wales, West Midlands
<b>North West</b>	Cheshire, Lancashire
<b>North and Scotland</b>	Cumberland, Durham, Northumberland, Yorkshire, Scotland

A copy of the questionnaire will be provided, on request, by the HDC.